

Amendments to the Specification:

Please replace the paragraph beginning at page 2, line 23, with the following amended paragraph:

Exon 1 of the VCAM-1 gene has been cloned and published as an EMBL Accession number: M92431 (2396 bp; hereafter referred to as SEQ ID NO:2) and all positions herein relate to the position therein unless stated otherwise or apparent from the context.

Please replace the paragraph beginning at page 3, line 8, with the following amended paragraph:

According to one aspect of the present invention there is provided a method for the diagnosis of a single nucleotide polymorphism in VCAM-1 in a human, which method comprises determining the sequence of the nucleic acid of the human at one or more of positions 278, 647, 707, 748, 829, and 1467 in the VCAM-1 gene as defined by the positions in SEQ ID NO:2 EMBL ACCESSION NO. M92431, and determining the status of the human by reference to polymorphism in the VCAM-1 gene.

Please replace the paragraph beginning at page 4, line 7, with the following amended paragraph:

In another aspect of the invention we provide a method for the diagnosis of VCAM-1 ligand-mediated disease, which method comprises:

- i) obtaining sample nucleic acid from an individual,
- ii) detecting the presence or absence of a variant nucleotide at one or more of positions 278, 647, 707, 748, 829, and 1467 (as defined by the position in SEQ ID NO:2 EMBL accession number M92431), in the VCAM-1 gene, and
- iii) determining the status of the individual by reference to polymorphism in the VCAM-1 gene.

Please replace the paragraph beginning at page 6, line 23, with the following amended paragraph:

In a further aspect, the diagnostic methods of the invention are used to assess the efficacy of therapeutic compounds in the treatment of VCAM-1 ligand mediated diseases such as autoimmune, allergic and vascular inflammatory diseases. The polymorphisms identified in the present invention occur in the promoter region of the VCAM-1 gene. The changes are not expected to alter the amino acid sequence of VCAM-1, but several of the polymorphisms affect transcription sites within the promoter region and thus may affect the transcription of the VCAM-1 gene. For example the changing of the nucleotide at position 748 (as defined by the position in SEQ ID NO:2 EMBL ACCESSION NO. M92431) from T to C results in the gain of an[[a]] E1a-F rev site and the loss of a TATA box.

Please replace the paragraph beginning at page 7, line 27, with the following amended paragraph:

According to another aspect of the present invention there is provided a nucleic acid comprising any one of the following polymorphisms:
the nucleic acid of SEQ ID NO:2 EMBL ACCESSION NO. M92431 with C at position 278 in the promoter sequence;
the nucleic acid of SEQ ID NO:2 EMBL ACCESSION NO. M92431 with G at position 647 in the promoter sequence;
the nucleic acid of SEQ ID NO:2 EMBL ACCESSION NO. M92431 with C at position 707 in the promoter sequence;
the nucleic acid of SEQ ID NO:2 EMBL ACCESSION NO. M92431 with C at position 748 in the promoter sequence;
the nucleic acid of SEQ ID NO:2 EMBL ACCESSION NO. M92431 with A at position 829 in the promoter sequence;
the nucleic acid of SEQ ID NO:2 EMBL ACCESSION NO. M92431 with C at position 1467 in the promoter sequence;

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or a complementary strand thereof or a fragment thereof of at least 20 bases comprising at least one polymorphism.

Please replace the paragraph beginning at page 10, line 18, with the following amended paragraph:

According to another aspect of the present invention there is provided an allele specific primer capable of detecting a VCAM-1 gene polymorphism at one or more of positions 278, 647, 707, 748, 829 and 1467 in the VCAM-1 gene as defined by the positions in SEQ ID NO:2 EMBL ACCESSION NO. M92431.

Please replace the paragraph beginning at page 11, line 6, with the following amended paragraph:

According to another aspect of the present invention there is provided an allele-specific oligonucleotide probe capable of detecting a VCAM-1 gene polymorphism at one or more of positions 278, 647, 707, 748, 829, and 1467 in the VCAM-1 gene as defined by the positions in SEQ ID NO:2 EMBL ACCESSION NO. M92431.

Please replace the paragraph beginning at page 11, line 25, with the following amended paragraph:

In another aspect of the invention, the single nucleotide polymorphisms of this invention may be used as genetic markers in linkage studies. This particularly applies to the polymorphism at 278 (as defined by the position in SEQ ID NO:2 EMBL ACCESSION NO. M92431) because of its relatively high frequency (see below). The VCAM-1 gene has been mapped to chromosome 1p31-32 (Cybulsky *et al* Proc. Natl. Acad. Sci. USA **88**, 7859-7863, 1991).

Please replace the paragraph beginning at page 12, line 16, with the following amended paragraph:

According to another aspect of the present invention there is provided a method of treating a human in need of treatment with a VCAM-1 ligand antagonist drug in which the method comprises:

- i) diagnosis of a single nucleotide polymorphism in VCAM-1 gene in the human, which diagnosis comprises determining the sequence of the nucleic acid at one or more of positions 278, 647, 707, 748, 829, and 1467 (as defined by the position in SEQ ID NO:2 EMBL accession number M92431), and determining the status of the human by reference to polymorphism in the VCAM-1 gene; and
- ii) administering an effective amount of a VCAM-1 ligand antagonist .

Please replace the paragraph beginning at page 13, line 4, with the following amended paragraph:

According to another aspect of the present invention there is provided use of a VCAM-1 ligand antagonist drug in preparation of a medicament for treating a VCAM-1 ligand mediated disease in a human diagnosed as having a single nucleotide polymorphism at one or more of positions 278, 647, 707, 748, 829, and 1467 (as defined by the position in SEQ ID NO:2 EMBL accession number M92431).

Please replace the paragraph beginning at page 13, line 9, with the following amended paragraph:

According to another aspect of the present invention there is provided a pharmaceutical pack comprising VCAM-1 ligand antagonist drug and instructions for administration of the drug to humans diagnostically tested for a single nucleotide polymorphism at one or more of positions 278, 647, 707, 748, 829, and 1467 (as defined by the position in SEQ ID NO:2 EMBL accession number M92431).

Please replace the paragraph beginning at page 15, line 1 (under the table), with the following amended paragraph:

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¹As defined by the position in SEQ ID NO:2 EMBL ACCESSION NO. M92431

Please replace the paragraph beginning at page 15, line 9, with the following amended paragraph:

Standard methodology can be used to detect the polymorphism at position positions 647 (as defined by the position in SEQ ID NO:2 EMBL ACCESSION NO. M92431) based on the materials set out below.